

Amendments to the Claims:

Please amend Claims 1, 3, 13, and 16 and add new Claims 17-65 as follows:

1. (Currently Amended) A card-cleaning assembly for a printer, comprising:
 - a card-cleaning means comprising a card-cleaning roller mounted to a frame of the printer; and ~~adjacent to a spring biasing means to urge the roller against~~ a surface of the card so that the roller collects debris from the card surface; and
 - a cleaning means for removing debris from the card-cleaning roller, the cleaning means, comprising:
 - (i) a pivot arm pivotably attached to the printer frame; and
 - (ii) an adhesive tape cartridge mounted to the pivot arm, the tape cartridge including a supply tape core ~~lower~~ and a take up upper ~~upper~~ tape core;wherein a force exerted on the pivot arm causes the arm to pivot so that the tape cartridge and cleaning roller engage each other, and the tape removes debris from the roller as the tape is peeled from the supply ~~lower~~ tape core to the take up ~~upper~~ tape core and the cleaning roller rotates.
2. (Original) The card-cleaning assembly of claim 1, wherein the cleaning roller is made from a rubber material.
3. (Currently Amended) The card-cleaning assembly of claim 1; further comprising wherein the spring biasing means connected to said card-cleaning roller to urge said card cleaning roller against the surface of the card comprises a pair of springs.
4. (Original) The card-cleaning assembly of claim 1, wherein a motor means causes the pivot arm to pivot so that the tape cartridge and cleaning roller engage each other.
5. (Original) The card-cleaning assembly of claim 4, wherein the pivot arm comprises a motor gear and shaft for driving the arm.

6. (Original) The card-cleaning assembly of claim 5, wherein the pivot arm further comprises an idler gear having a one way clutch.

7. (Original) The card-cleaning assembly of claim 6, wherein the pivot arm further comprises a drive gear spline.

8. (Original) The card-cleaning assembly of claim 1, wherein the upper core of the tape cartridge comprises a spline for mounting the tape cartridge to the pivot arm.

9. (Original) The card-cleaning assembly of claim 1, wherein the peeling of the tape exerts a force on the cleaning roller, thereby causing the tape to maintain continuous contact with the cleaning roller as the roller rotates.

10. (Original) The card-cleaning assembly of claim 9, wherein the peeling tape exerts a force on the cleaning roller so that the roller rotates at about twice the rotational speed as the lower tape core.

11. (Original) The card-cleaning assembly of claim 1, further comprising a rotatable slotted wheel attached to the cleaning roller and an optical sensor for detecting movement of the slots on the wheel.

12. (Original) The card-cleaning assembly of claim 1, wherein the printer is a thermal printer.

13. (Original) A thermal printer apparatus, comprising:
a) a print station for thermally printing indicia on a surface of a card substrate;
b) a linear transport system for transporting the card beneath the print station and to the card cleaning assembly, the linear transport system comprising:
(i) a carriage for receiving the card, wherein the surface of the card to be printed faces upwards in the carriage;

~~(ii) a linear guide means for guiding the carriage beneath the print means; and~~

~~(iii) a reversible drive means for driving the carriage along the linear guide means; and~~

c) a card-cleaning means for cleaning the surface of the card as the card is transported in the printer, the card-cleaning means, comprising:

a card-cleaning roller mounted to a frame of the printer, and in contact with a spring biasing means to urge the roller against a surface of the card so that the roller collects debris from the card surface; and

a cleaning means for removing debris from the card-cleaning roller, the cleaning means, comprising:

(i) a pivot arm pivotably attached to the printer frame; and

(ii) an adhesive tape cartridge mounted to the pivot arm, the tape cartridge including a supply tape core ~~lower~~ and a take up upper ~~upper~~ tape core;

wherein a force exerted on the pivot arm causes the arm to pivot so that the tape cartridge and cleaning roller engage each other, and the tape removes debris from the roller as the tape is peeled from the ~~lower~~ supply tape core to the ~~upper~~ take up tape core and the roller rotates.

14. (Original) The thermal printer apparatus of claim 12, wherein the linear transport system further comprises a card-flipping means for lifting the card from the carriage, rotating the card, and returning the card to the carriage, whereby the other surface of the card faces upwards in the carriage and can be printed thereon.

15. (Original) The thermal printer apparatus of claim 12, further comprising a lamination station for laminating a film to a surface of the card.

16. (Currently Amended) A card-cleaning assembly for a printer, comprising:

a card-cleaning means comprising a translating, ~~non-rotatable~~ plate member mounted to a frame of the printer, said plated member being capable of contacting and a spring

~~biasing means to urge the plate against~~ a surface of the card so that the plate collects debris from the card surface; and

a cleaning means for removing debris from the card-cleaning plate member, the cleaning means, comprising:

- (i) a pivot arm pivotably attached to the printer frame; and
- (ii) an adhesive tape cartridge mounted to the pivot arm, the tape cartridge including a supply tape core ~~lower~~ and a take up ~~upper~~ tape core;

wherein a force exerted on the pivot arm causes the arm to pivot so that the tape cartridge and plate member engage each other, and the tape removes debris from the plate as the tape is peeled from the supply ~~lower~~ tape core to the take up ~~upper~~ tape core and the plate member translates.

17. (New) A card-cleaning assembly for a printer, comprising:

a roller mounted to a frame of the printer and adjacent to a surface of a card in the printer such that the roller collects debris from the surface of the card;

a pivot arm connected to the frame of the printer;

a supply tape core and a take up tape core containing a media having at least one adhesive surface, wherein at least one of said supply tape core and said take up tape core is coupled to said pivot arm,

means for applying a force to said pivot arm, wherein the force exerted on the pivot arm causes the arm to pivot toward said roller so that the media engages said roller to thereby remove debris from the roller.

18. (New) An assembly according to claim 17, wherein both of said supply and take up tape cores are coupled to said pivot arm.

19. (New) An assembly according to claim 17 wherein said supply tape core is in contact with said roller when said pivot arm is pivoted toward said roller.

20. (New) An assembly according to claim 17, wherein said means for applying a force comprises a motor coupled to said pivot arm.

21. (New) An assembly according to claim 20, wherein said means for applying a force further comprises a motor gear and shaft for driving the arm.

22. (New) An assembly according to claim 21, wherein said means for applying a force further comprises an idler gear having a one way clutch.

23. (New) An assembly according to claim 17, wherein said supply and take up tape cores are located in a cartridge.

24. (New) An assembly according to claim 17 further comprising an encoder in communication with said roller for detecting rotation of said roller.

25. (New) A method for cleaning a card located in a card printer comprising:
providing a pivot arm connected to the frame of the printer;
providing a supply tape core and a take up tape core containing a media having at least one adhesive surface wherein at least one of said supply tape core and said take up tape core is coupled to said pivot arm;
contacting a roller to a surface of the card such that the roller collects debris from the surface of the card;
applying a force to the pivot arm, wherein the force exerted on the pivot arm causes the arm to pivot toward said roller so that the media engages the roller to thereby remove debris from the roller.

26. (New) A method according to claim 25, wherein said providing a supply tape core and a take up tape core provides both of the supply and take up tape cores on the pivot arm.

27. (New) A method according to claim 25 wherein in said applying step the supply tape core is in contact with the roller when said pivot arm is pivoted toward the roller.

28. (New) A method according to claim 25, wherein said applying step drives the pivot arm toward the roller using a motor coupled to the pivot arm.

29. (New) A method according to claim 25, wherein said applying step drives the pivot arm toward the roller using a motor assembly coupled to the pivot arm, the motor assembly comprising:

- a motor;
- a motor gear;
- a shaft; and
- an idler gear having a one way clutch.

30. (New) A method according to claim 25 further comprising detecting rotation of the roller.

31. (New) A card-cleaning assembly for a printer, comprising:

a roller mounted to a frame of the printer and adjacent to a surface of a card in the printer such that the roller collects debris from the surface of the card;

a supply tape core and a take up tape core containing a media having at least one adhesive surface, said media in operable communication with said roller for removing debris from said roller; and

an encoder in communication with said roller for detecting rotation of said roller.

32. (New) An assembly according to claim 31 further comprising a pivot arm connected to the frame of the printer, wherein at least one of said supply and take up tape cores are connected to said pivot arm and said pivot arm being capable of selectively contacting the media with said roller.

33. (New) An assembly according to claim 32 further comprising a processor in communication with said encoder and said pivot arm, wherein said processor controls said pivot arm to contact the media with said roller for a selected amount of rotation of said roller.

34. (New) An assembly according to claim 33, wherein said processor controls said pivot arm to contact the media with said roller for at least one full rotation of said roller.

35. (New) A method for cleaning a card in a card printer comprising:
contacting a roller with a surface of a card to be cleaned such that the roller collects debris from the surface of the card;
selectively contacting a media having at least one adhesive surface with said roller for removing debris from said roller; and
detecting rotation of said roller with an encoder.

36. (New) A method according to claim 35, wherein said selectively contacting step contacts the media with the roller for a selected amount of rotation of the roller, where the amount of rotation is detected by said detecting step.

37. (New) A method according to claim 36, wherein said selectively contacting step contacts the media with the roller for at least one full rotation of said roller.

38. (New) A cartridge for cleaning cards in a card printer comprising:
a housing;
a media having at least one surface coated with an adhesive material;
a supply roll located in said housing and containing a supply of said media;
a take up roll spaced apart from said supply roll in said housing, said take up roll for receiving said media as said media is paid out from said supply roll,
wherein said supply roll comprises a core comprising a body having an outer surface for maintaining said media, and wherein said media comprises an adhesive on a first surface, wherein said media is wound about the outer surface of said supply roll such that said first surface is opposite the outer surface of said core of said supply roll.

39. (New) A cartridge according to claim 38, wherein said take up roll comprises a core comprising a body having an outer surface for maintaining said media, and wherein said media

comprises an adhesive on a first surface, wherein said media is wound about the outer surface of said supply roll such that said first surface faces the outer surface of said core of said take up roll.

40. (New) A device for cleaning cards in a card printer comprising:
a media having at least one surface coated with an adhesive material;
a supply roll containing a supply of said media;
a take up roll spaced apart from said supply roll, said take up roll for receiving said media as said media is paid out from said supply roll,
wherein at least one of said supply roll and take up roll comprises a core having one or more splines located in an inner surface of said core, whereby said spline facilitates connection of said core to a spindle of a cleaning apparatus.

41. (New) A device according to claim 40, wherein said core has a body extending axially between opposed ends and said spline extends axially along said body.

42. (New) A device according to claim 40, wherein said spline comprises a body extending between opposed ends in a direction generally parallel to an axial direction of said core and said body of said spline is tapered in the axial direction along at least a portion of the body.

43. (New) A device according to claim 40, wherein said spline comprises sidewalls that extend from the inner surface of said core to a top surface, wherein at least a portion of the sidewalls are angled.

44. (New) A device according to claim 40, wherein said core comprises a body extending between opposed ends and two or more splines located in an inner surface of said core and extending axially, wherein said two or more splines have respective distal ends that are connected to each other by a wall extending in a generally circumferential direction.

45. (New) A device according to claim 40, wherein said core comprises at least two splines spaced apart from each other creating a slot between said splines.

46. (New) A device according to Claim 40, further comprising a plurality of splines arranged circumferentially about the inner surface of said core, said splines extending in a generally axial direction of the core and defining a plurality of slots therebetween, a first end of each spline being tapered in the axial direction such that each slot defines a first portion and a second portion, the first portion of each slot being wider circumferentially than the second portion and the first portion being disposed between a first end of the core and the second portion of the slot such that each first portion of each slot is configured to guide a portion of the spindle into said second portion when the first end of the core is advanced toward the spindle.

47. (New) A device according to claim 40 further comprising a housing connected between said supply and take up rolls, such that the housing supports the supply and take up rolls in a spaced configuration.

48. (New) A device according to claim 47, wherein said housing comprises a connector for connecting said housing to a cleaning apparatus, wherein said connector of said housing resists rotation of said housing relative to the cleaning apparatus.

49. (New) A device according to claim 48, wherein said connector defines a body having a bore at least partially therethrough for receiving a connector located on the cleaning apparatus, wherein said body of said connector defines a non-circular cross-sectional profile that mates with a corresponding profile of the connector located on the cleaning apparatus such that a resulting connection between the housing and the cleaning apparatus thereby resists rotation of said housing relative to the cleaning apparatus.

50. (New) A card-cleaning device for a printer, comprising:
a roller mounted to a frame of the printer and adjacent to a surface of a card in the printer such that the roller collects debris from the surface of the card;
a pivot arm connected to the frame of the printer; and
a spindle connected to said frame for receiving a cleaning media located on a core wherein the media includes at least one adhesive surface for contacting said roller to thereby remove debris from the roller,

wherein said spindle comprises one or more splines, whereby said spline facilitates connection of said spindle to the core of the cleaning media.

51. (New) A device according to claim 50, wherein said spine has a body extending axially between opposed ends and said spline extends axially along said body.

52. (New) A device according to claim 50, wherein said spline comprises a body extending between opposed ends in a direction generally parallel to an axial direction of said spindle and said body of said spline is tapered in the axial direction along at least a portion of the body.

53. (New) A device according to claim 50, wherein said spline comprises sidewalls that extend along said spindle a surface of said spindle to a top surface, wherein at least a portion of the sidewalls are angled.

54. (New) A device according to claim 50, wherein said spindle comprises at least two splines spaced apart from each other creating a slot between said splines.

55. (New) A device according to Claim 50, further comprising a plurality of splines arranged circumferentially about said spindle, said splines extending in a generally axial direction of the spindle and defining a plurality of slots therebetween, a first end of each spline being tapered in the axial direction such that each slot defines a first portion and a second portion, the first portion of each slot being wider circumferentially than the second portion and the first portion being disposed between a first end of the spindle and the second portion of the slot such that each first portion of each slot is configured to guide a portion of the core of the media into said second portion when the core is advanced toward the spindle.

56. (New) A device according to claim 50, wherein said media is located in a housing, wherein said device further comprises a connector for connecting to a connector of said housing, wherein said connector defines a body having a non-circular cross-sectional profile that mates with a corresponding profile of the connector of the housing of the media such that a resulting connection resists rotation of the housing relative to the device.

57. (New) A card cleaning cartridge for use with a card printer comprising;
a housing adaptable for connection to a card cleaning assembly of the printer;
a supply tape core located at a first position in said housing, said supply tape core containing a media having at least one surface coated with an adhesive material;
a take up tape core located at a second position in said housing spaced apart from said supply tape core, said take up tape core receives the media as the media is paid out from said supply roll.

58. (New) A cartridge according to claim 57, wherein at least one of said supply tape core and take up tape core comprises one or more splines located in an inner surface of said core, whereby said spline facilitates connection of said core to a spindle of the cleaning assembly of the printer.

59. (New) A cartridge according to claim 57, wherein said housing comprises a connector for connecting said housing to the cleaning assembly of the printer, wherein said connector of said housing resists rotation of said housing relative to the cleaning apparatus.

60. (New) A combination for cleaning cards in a card printer comprising:
a supply tape core adapted to hold a length of cleaning tape having an adhesive surface;
a take-up tape core adapted to receive said cleaning tape after it has been used; and
a tape measuring arrangement configured to develop an electrical signal indicating travel of a predetermined length of cleaning tape.

61. (New) The combination of claim 60 wherein said tape measuring arrangement comprises an encoder and coupled controller.

62. (New) The combination of claim 60 wherein the predetermined length of cleaning tape comprises a length sufficient to clean an associated cleaning roller when operatively coupled thereto.

63. (New) A combination for cleaning cards in a card printer comprising:
a replaceable cleaning cartridge, comprising:

a housing, and

mounted within said housing a supply tape core adapted to hold a length of cleaning tape having an adhesive surface and a take-up tape core adapted to receive said cleaning tape after it has been used; and

a tape measuring arrangement configured to develop an electrical signal indicating travel of a predetermined length of cleaning tape.

64. (New) The combination of claim 63 wherein said tape measuring arrangement comprises an encoder and coupled controller.

65. (New) The combination of claim 63 wherein the predetermined length of cleaning tape comprises a length sufficient to clean an associated cleaning roller when operatively coupled thereto.